Attached hereto is a marked-up version of the changes made to the claims by the current amendment.

Respectfully submitted,

WOOD, HERRON & EVANS L.L.P.

Kurt A. Summe
Reg. No. 36,023

2700 Carew Tower
Cincinnati, OH 45202
(513) 241-2324

VERSION WITH MARKINGS TO SHOWN CHANGES MADE

--This application is a continuation of U.S. Application No. 09/012,743, which was filed on January 23, 1998, which is a continuation-in-part of [co-pending] U.S. Application No. 09/601,687(abandoned), which was filed on February 15, 1996, which is a continuation-in-part of Application No. 567,797, filed December 5, 1995, now Patent No. 5,766,404, which is a continuation-in-part of Application No. 350,320, filed December 5, 1994.

Please amend the paragraph beginning on page 19, line 6 as follows:

As is shown in Fig. 3b, after the last PC board [28] 28' has been loaded, the first catch finger 70 is raised and the push mechanism 20 is moved by the linear drive assembly 22 to a location outside of the perimeter of the chamber base 16. At the same time, the conveyor position actuator 32 moves the conveyor 30 back out of the reaction chamber 14 area as well. The reaction chamber 14 is then lowered by the chamber lift actuators 40 onto the chamber base 16, whereon the reaction chamber 14 is vacuum-tightly fittable, and the plasma process is initiated. Referring again to Fig. 2, there is shown a vacuum and plasma generating system 27 having a number of elements of generally conventional nature. A vacuum port 90, to which is connected a vacuum pump (not shown), provides that the reaction chamber 14 may be evacuated to a predetermined level, which is generally in the so-called "soft vacuum" region of 0.1-1.0 mm Hg. A gas distribution manifold 92

allows for the continuous introduction of process gas (e.g., oxygen and argon) within the reaction chamber 14. Flexible Teflon® tubing (not shown) provides that the gas manifold 92 may be raised in conjunction with the reaction chamber 14. A plasma is generated within the evacuated reaction chamber 14 with a radio frequency generator 94, there being provided for this purpose four radio frequency feedthroughes 96 which are located in the chamber base 16. An electrode 98 for the application of high voltage, to which the chamber guide rails 52 are clamped with guide rails clamps 100 (see Fig. 1) and conveniently supported thereby, provides that plasma reaction may then occur at the surface of the PC boards 28. It will be apparent to those with ordinary skill in the art that other electrical and radio frequency configurations for the chamber guide rails 52 might be employed. Thus, the chamber guide rails 52 might be radio frequency powered, or grounded, or electrically "floating" (isolated), or some combination of the foregoing. Additionally, a DC bias circuit can be included in the plasma treatment system to increase the directionality of plasma flow and the energy level of the ions and electrons in the plasma. The higher energy level also increases the ionization rate, thus increasing the number of ions and electrons. The increased energy level and increased ionization rate both act to produce a higher etching rate and thus a short processing time. The increased bias also results in a more directional flow of ions onto the parts, resulting in a more anisotropic etching which is required when etching holes and vias. Anisotropic etching provides straight wall etching which decreases

undercutting. This DC bias circuit is discussed in more detail below (see Fig. [120] 12).

Claims 1-27 have been canceled.

Claims 28-64 have been added.